



# **Professional Responsibility in Agricultural Research**

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# **Agricultural Research Service (ARS)**

- ***Mission:*** Conduct research to meet the food and fiber needs of the nation; to sustain a competitive agricultural economy; and to enhance the natural resource base and the environment.
  - Intramural research arm of the USDA
  - Conducts research to support regulatory and “action” agencies (FSIS, APHIS, FNS, NRCS)
  - Extensive collaborations with academia and industry
  - Over 100 locations throughout the country



# **Ethical Issues Related to Agricultural Research**

- **Scope of agricultural research is of great economic, health and environmental impact:**
  - Food safety and human nutrition
  - Plant production and protection
  - Animal health and animal protection
- **Nature of the research has high potential for misuse of research findings**
  - High consequence events



# ARS Code of Ethics

- I dedicate myself to the pursuit and promotion of beneficial scientific investigation, consistent with the mission of the ARS.
- I will never hinder the beneficial research of others.
- I will conduct, discuss, manage, judge, and report science honestly thoroughly, and without conflict of interest.
- I will encourage constructive critique of my personal science and that of my colleagues, in a manner that fosters harmony and quality amid scientific debate.



# **Code of Conduct (continued)**

- **I recognize past and present contributors to my science and will not accept unwarranted credit for accomplishments of others.**
- **I will maintain and improve my professional skills and be a mentor to others.**
- **I will ensure safety and humane treatment of human and animal subjects and will prevent abuse of resources entrusted to me.**



# **Issues Related to the ARS Code of Ethics**

- **Developed prior to concerns over homeland security (pre - 9/11)**
- **Aimed at personal behavior**
- **Does not adequately address societal issues such as environment, “dual use” of information, etc.**



# **Responsible Conduct by Scientists**

- **Conduct research in light of existing policies:**
  - **Protection of human subjects, animal care and use, radioactive material use, etc.**
  - **Protection of the environment, workers, and the general population**
  - **Protection of intellectual property**
  - **Concerns over “dual use” of information**



# **Challenges to Responsible Conduct**

- **ARS is strictly a research agency – it does not conduct classified research**
- **Freedom to publish is a primary concern but we must be aware of potential misuse of published information**
  - **Scientist recognition and promotion is dependent on publication**





# **Challenges (continued)**

- **Education of scientists on the dual use of information**
  - Science regarded as an “open enterprise”
- **Safeguards, physical and intellectual, must be developed and put in place**
- **Cooperation with universities, industry & international collaborators is a particular challenge**

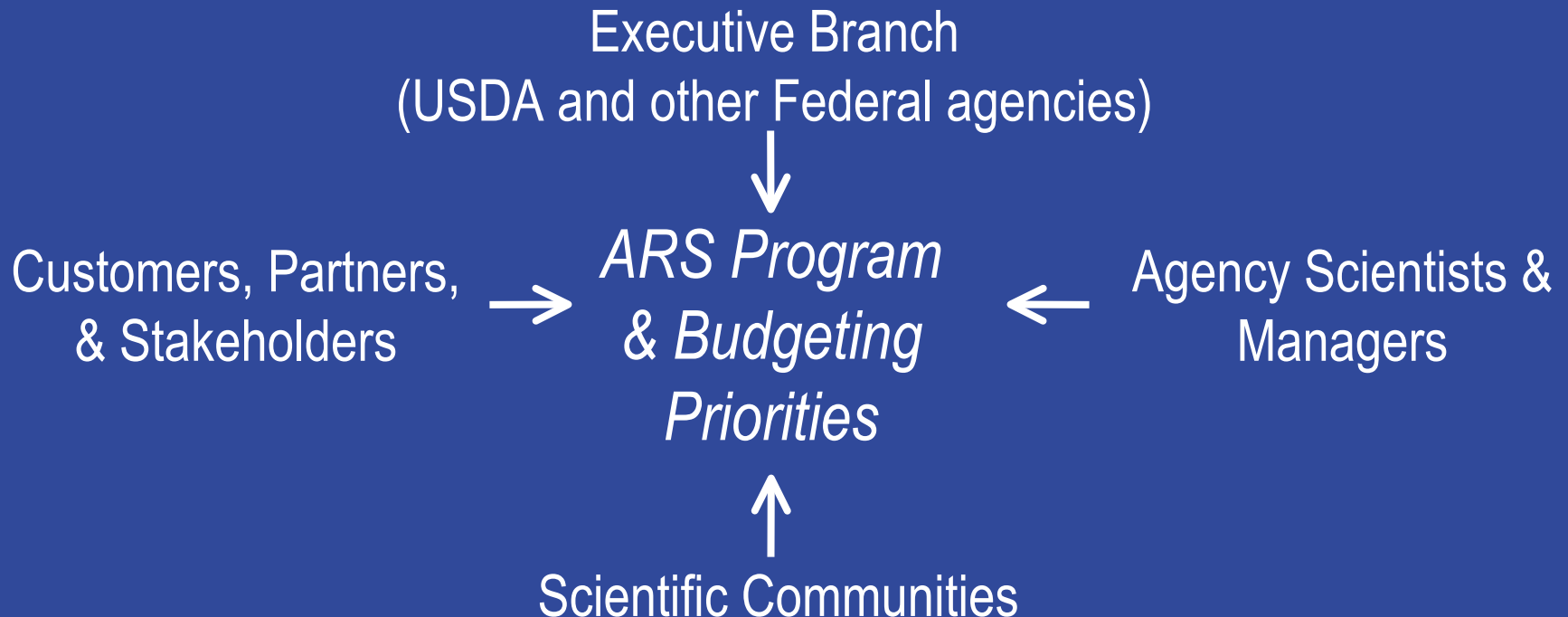


# **Responsible Use of Research Facilities**

- **Agricultural threats require containment facilities**
  - Responsible conduct of research
  - Potential for environmental damage
  - Responsibilities of scientists to follow procedures
- **Potential hazards of zoonotic diseases**
  - Health of workers, coworkers and public
- **Open nature of agriculture and food production and distribution**



# ARS Priority Setting





# Concerns Over Research Priorities

- Are the needs of stakeholders and customers the same as those of ARS?
- Are they in the public interest?
- How can and should ARS protect information developed in collaboration with others (such as cooperators)?
- How can ARS protect information provided to others?